The Use of the SAVRY and YLS/CMI in Adolescent Court Proceedings: A Case Law Review

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Abstract

Despite the continued growth of adolescent risk assessment tools, we do not know how these tools are being used in adolescent court cases or how this information influences legal decision making. To address this gap, we reviewed 50 Canadian, American, and international adolescent offender cases using the Structured Assessment of Violence Risk in Youth or Youth Level of Service/Case Management Inventory. The results confirm that adolescent risk assessment tools are primarily introduced during sentencing or adult transfer proceedings. Judges identified the specific risk and protective factors of youth in 36.2% and 19.0% of cases, respectively. In terms of legal decision making, the risk assessment was either directly or indirectly referred to in 76.0% of cases; however, judges most often placed some weight on the risk assessment as a part of an enumerated list of other important factors. Although risk assessments were generally considered admissible in these cases, some legal concerns were raised, particularly with the use of risk assessments to guide sentencing decisions.

Keywords: risk assessment, SAVRY, YLS/CMI, adolescent, youth, law

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Mental health professionals working within the justice system often conduct risk assessments which evaluate the likelihood of an offender to reoffend. Historically, these assessments have occurred in an informal and discretionary manner by individuals with varying experience, knowledge, and philosophies (Wiebush, Baird, Krisberg, & Onek, 1995). However, this type of assessment, referred to as unstructured clinical judgement, is subject to significant and well-known limitations including high levels of inconsistency and bias, and poor predictive accuracy (Borum, 2000; Hoge, 2002). In fact, past research has shown that clinicians are only modestly better than chance when making predictions of violence (Borum, 1996; Mossman, 1994). As a result, there has been growing emphasis on the use of standardized assessment tools which provide more consistent and valid judgements (Hoge, 2002).

Standardized risk assessment tools have become increasingly more widespread amongst mental health professionals and clinicians (Borum, Lodewijks, Bartel, & Forth, 2010; Otto & Heilbrun, 2002). This is demonstrated by clinical surveys showing that more than 90% of forensic clinicians belonging to professional organizations assess risk in their evaluation of offenders (Archer, Buffington-Vollum, Stredny, & Handel, 2006; Viljoen, McLachlan, & Vincent, 2010). In addition, some legal cases also appear to demonstrate a preference for structured assessment tools. For example, in *Coble v. Texas* (2011) the American Psychological Association provided an amicus curiae brief to the court which argued that the unstructured clinical judgement of Dr. Coons, a forensic psychiatrist, should not be relied upon to determine future dangerousness because it can be excessively persuasive to the jury and, unlike structured risk assessment, is not based on reliable scientific methods (American Psychological Association, 2012). Although the courts were dismissive of Dr. Coons' testimony, they upheld the decision to admit the testimony and consider it as harmless error because they believed Coble was highly dangerous in spite of the testimony provided by Dr. Coons. Nevertheless, this brief is important because it reflects growing consensus that unstructured clinical judgement is inferior to more systematized methods of assessing risk. Furthermore, consistent with social scientists, some legal scholars have also asserted that the development and use of reliable risk assessment methods is a pressing issue in legal settings (Luther & Mansfield, 2006).

While significant advances have been made to address these concerns, the development of adolescent risk assessment tools has historically lagged behind that of adult risk assessment due to the unique considerations that arise in adolescent risk assessments (Borum, 2003). In particular, risk assessments conducted with adolescents must be developmentally informed (Borum & Verhaagen, 2006; Hoge & Andrews, 1996) and account for differences in risk factors, behavioural norms, stability of individual factors, psychosocial maturity, and base rates of violence (Borum, 2000; Borum & Verhaagen, 2006). Based on clinician surveys (Viljoen et al., 2010), the most commonly used adolescent risk assessment tools include the Structured Assessment of Violence Risk in Youth (SAVRY; Borum, Bartel, & Forth, 2006) and the Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 2002; Hoge & Andrews, 2011).

The Structured Assessment of Violence Risk in Youth (SAVRY; Borum et al., 2006) is a structured professional judgement tool designed to assess the risk for violence in adolescents aged 12 to 18. It includes 24 empirically supported risk factors for violence which are mostly

dynamic and divided into historical, individual, and social/contextual categories. Importantly, the SAVRY also includes six protective factors. A unique feature of the SAVRY is its ability to include additional case-specific risk and protective factors which may be important in understanding the risk of a particular youth. After considering the relative importance of each of the youth's risk and protective factors, the evaluator uses these ratings to inform their judgement of the youth's overall level of risk using a summary risk rating of low, moderate, or high (Borum et al., 2006; Borum et al., 2010).

Research results currently available for the SAVRY are promising. In particular, a meta-analysis conducted by Olver, Stockdale, and Wormith (2009) has found the SAVRY to demonstrate good predictive accuracy for both general and violent recidivism (r_w = .32 and .30, respectively). Moreover, protective factors have been found to be predictive of desistance from reoffending (Lodewijks, Ruiter, & Doreleijers, 2010; Rennie & Dolan, 2010); for example, in one sample of high risk youth the violent recidivism rate for those with and without protective factors present was 6% and 40%, respectively (Lodewijks et al., 2010). Furthermore, research demonstrates good to excellent inter-rater reliability with intra-class correlation coefficients ranging from .81 to .97 for SAVRY risk totals and .72 to .95 for SAVRY summary risk ratings (Borum et al., 2010).

Alternatively, the Youth Level of Service/Case Management Inventory (YLS/CMI; Hoge & Andrews, 2002; Hoge & Andrews, 2011) is one of several youth adapted versions of the Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995). It is designed to assess the risk and need factors of adolescents, and to assist in effective case planning and management (Hoge & Andrews, 2002; Hoge & Andrews, 2011; Hoge, Andrews, & Leschied, 2002). It is comprised of eight subscales containing a total of 42 empirically supported static and dynamic risk factors. Importantly, unlike the SAVRY, the YLS/CMI is an adjusted actuarial tool which provides normative cut off scores to categorize the youth's overall risk from low to very high. However, it also allows the evaluator to include additional factors relevant to the case and, consequently, to provide their professional judgement of the youth's overall risk based on all of the available information (Hoge, 2005).

Although it utilizes a different approach than the SAVRY, the YLS/CMI reports similar levels of predictive validity. In particular, meta-analysis has shown that the YLS/CMI has good predictive accuracy; however, this is slightly better for general recidivism than violent recidivism (r_w = .32 and .26, respectively; Olver et al., 2009). Total scores obtained on the YLS/CMI have also been significantly correlated with serious reoffenses, the number of new offenses, and time until reoffense (Schmidt, Hoge, & Gomes, 2005). Furthermore, intra-class correlations for the subscales and total scores of the YLS/CMI have generally been found to be adequate (Schmidt et al., 2005).

In addition to the YLS/CMI, several other variants of the LSI-R have been developed for use in national and international contexts. In Canada, for example, researchers have developed the Level of Service Inventory – Ontario Revised (LSI-OR; Andrews, Bonta, & Wormith, 1995) and the Level of Service Inventory – Saskatchewan Edition (LSI-SK; Andrews, Bonta, & Wormith, 2001). International adaptations have also been developed in countries such as Australia (YLS/CMI-AA; Hoge & Andrews, 1995). While the YLS/CMI is often considered to be a representative illustration of these other adaptations due to the substantial overlap and

similarity between them (Olver et al., 2009), some independent research has been conducted in order to evaluate the validity of these tools within their respective populations. In particular, recent research by Luong and Wormith (2011) has suggested that total scores on the LSI-SK are also strongly predictive of overall recidivism ($r = .39$, $p < .001$).

Although research supports the predictive validity of both the SAVRY and the YLS/CMI (Olver et al., 2009), several studies that have directly compared the predictive validity of these two tools suggest that the SAVRY may outperform the YLS/CMI in its ability to predict general reoffending (Schmidt, Campbell, & Houlding, 2011; Welsh, Schmidt, McKinnon, Chattha, & Meyers, 2008). In particular, research by Schmidt, Campbell, and Houlding (2011) has shown that the SAVRY has significant predictive validity for general recidivism with an AUC score of .74 compared to an YLS/CMI score of .66. Consequently, this suggests that the YLS/CMI may be somewhat less efficient at predicting long term recidivism rates when compared to the SAVRY (Schmidt et al., 2011).

The Present Case Law Review

Although the above review demonstrates the prevalence of empirical support for adolescent risk assessment tools in clinical and forensic settings, we lack knowledge concerning the use of these tools within court cases involving adolescent offenders. For instance, we do not know how frequently risk assessment tools are used in adolescent cases and in what context, or how the courts use this information to inform their decisions. A recent case law review examined the use of two widely-used adult risk assessment tools – the Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 1998) and the Historical Clinical Risk-20 (HCR-20; Webster, Douglas, Eaves, & Hart, 1997) – in 46 court cases and found that these tools are typically used in cases concerning a sexually violent offender's commitment or release from a secure setting to parole (Vitacco, Erickson, Kurus, & Apple, 2012). Similar reviews have also examined the use of the Psychopathy Checklist-Revised (PCL-R; Hare, 2003; DeMatteo & Edens, 2006) and the Personality Assessment Inventory (PAI; Morey, 2007; Mullen & Edens, 2008). However, to date, no similar reviews have been conducted in the context of adolescent risk assessment.

In addition to how these tools are used, it is also currently unclear whether legal challenges have arisen regarding the use of the SAVRY and YLS/CMI in adolescent court cases. In terms of admissibility, various legal standards exist across jurisdictions and countries.[1] For instance, in Canada, in order to be considered admissible, evidence must be deemed relevant to the legal issue at hand and necessary in assisting the trier of fact; there must be no exclusionary rule prohibiting its admission; and it must be provided by a qualified expert (*R v. Mohan,* 1994). In the United States, the Daubert standard states that expert testimony must reflect scientific knowledge and be derived through scientific methods (*Daubert v. Merrell Dow Pharmaceuticals*, Inc., 1993). Alternatively, the Frye standard, which is relied on in some states, emphasizes that experts' evidence must be relevant to the issue at hand and commonly accepted (*Frye v. United* States, 1923). In the United Kingdom, expert testimony must be given by a qualified expert in the field, be provided objectively and in an unbiased manner, and meet the

[1] It is outside the scope of this article to review the full range of legal standards. In order to illustrate the range of standards, some examples have been provided. However, readers are referred to Brautbar (1999) and Law Commission (2011) for more information.

threshold for evidentiary reliability (Great Britain Law Commission, 2011). Thus, admissibility standards often refer to the scientific validity of measures and approaches.

While it is likely that both the SAVRY and YLS/CMI meet these basic admissibility criteria due to their strong research support and necessity as an alternative to unstructured clinical judgement, it is possible that other questions and concerns arise regarding the use of these tools in legal contexts. For instance, some legal and social science scholars have raised concerns about the potential for 'statistical justice' to occur when dispositions are determined according to the results of an actuarial risk assessment, rather than as a proportional response to the actual offense (Cole, 2007; Maurutto & Hannah-Moffat, 2007). Moreover, others have raised important questions concerning stigmatization and the negative impact of labelling youth as high risk (Bernburg, Khron, & Rivera, 2006; Viljoen et al., 2010; Welsh et al., 2008); the possible failure of some tools to recognize adolescents' risk as dynamic and changeable (Borum, 2000); and the relative lack of research on the utility of risk assessment tools in youth belonging to minority groups (Maurutto & Hannah-Moffat, 2007).

In order to fill these gaps within the current literature and provide more information to mental health professionals who conduct risk assessments for the courts, this article reviewed published and unpublished court cases involving adolescent offenders to examine the following: (a) how frequently adolescent risk assessment tools such as the SAVRY and YLS/CMI are used in court cases; (b) how these tools are used, such as what types of cases they are used in; (c) how much weight is placed on the risk assessment in judges' rationale for their decisions; and (d) whether there have been legal concerns or challenges associated with these tools. Where relevant, we include a narrative description of these key issues in order to provide more specific details, such as the specific nature of the legal challenges that arose.

Method

In order to capture a broad scope of cases, our search included cases originating from Canada, the United States, and internationally. Canadian cases were searched for using LawSource (also referred to as Westlaw, Canadian version), which captures reported and unreported federal and provincial case law[2]; as well as CanLii, which contains Canadian case law and statutes[3]. We searched for American cases with LexisNexis which includes reported and unreported decisions from the U.S. Supreme Court and Circuit Courts of Appeal, as well as some state court decisions, usually those from the appellate and high courts[4]. Finally, other international cases were searched for using databases which are accessible from CanLii including WorldLii[5], AustLii [6], and CommonLii[7]. Although not all cases involving adolescent offenders

[2] More information can be found at http://www.westlawecarswell.com/lawsource/.
[3] More information on CanLii coverage can be found at http://www.canlii.org/en/databases.html.
[4] More information on case coverage in Lexis Nexis can be found at http://w3.nexis.com/sources/.
[5] WorldLii, in partnership with AustLii, provides coverage of more than 1200 legal databases from 123 jurisdictions worldwide. A complete list of countries and databases can be found at http://www.worldlii.org/databases.html.
[6] AustLii provides access to more than 500 databases from the Australasian jurisdictions, including Australia, Tasmania, and New Zealand. More information can be found on http://www.austlii.edu.au/databases.html.
[7] CommonLii provides access to more than 950 databases from Commonwealth and common law jurisdictions including many African, Asian, Australasian, Caribbean, Central American, European, North American, South American, and Pacific Island countries. For a complete list of included countries and databases, information is available at http://www.commonlii.org/databases.html.

include written decisions that are available in legal databases, these cases can provide an important window into how these risk assessment tools are being used and the potential issues or concerns that may arise.

To identify relevant cases, we used a variety of search terms including: Structured Assessment of Violence Risk in Youth, Structure Assessment of Violence Risk in Youth, SAVRY, Youth Level Service, Youth Level of Service Inventory, Level of Service Inventory, YLS, and YLS/CMI. Furthermore, because the focus of this review is on adolescent court cases, we specified that cases must include the term youth, adolescent, or juvenile. Our search included all available cases up until August 1, 2013.

Our search initially identified 49 Canadian cases, 19 American Cases, and 5 international cases. However, upon examination many of these cases appeared to involve individuals who were adults at the time of the offense; it is likely that these cases were captured by our search due to the inclusion of the phrase *level of service inventory*, which is also used to refer to the adult LSI-R risk assessment tool, and because the terms *adolescent*, *juvenile*, and *youth* are often used in the context of discussing offense history. As a result, in order to be included in our sample we carefully reviewed all cases to ensure that (a) the defendant was 17 years old or younger at the time of the offense, and (b) that the risk assessment was completed using either the SAVRY or a youth specific adaptation of the LSI-R. Where it could not be clearly determined whether the Level of Service Inventory was a youth or adult adaptation, we eliminated these cases.

Following the identification of relevant cases, cases were coded using a standardized coding form developed and agreed upon by both authors, and based on previous research (Viljoen, MacDougall, Gagnon, & Douglas, 2010). This form included the following: (a) characteristics of the case including the type of legal proceeding and the country of origin; (b) the statements made within the case about the applicable risk assessment tool; (c) specific characteristics of the offender including their age and current charges; (d) the judge's statements about the risk assessment tool in making their decision (if applicable); and (e) the challenges or disputes associated with the use of risk assessment tools in the proceedings (if applicable).

Coding was completed by the first author in collaboration with the other author. In order to examine interrater reliability of the coding, an undergraduate Psychology student with training in research methods coded 10 randomly selected cases using the same standardized coding form. We examined interrater reliability for variables which were both factual (e.g., type of legal proceeding) and subjective (e.g., how much weight the judge placed on the risk assessment in their decision) in nature. As shown in Table 1, interrater reliability was substantial or better for all items (i.e., $\kappa > .80$; Landis & Koch, 1977), with a mean item kappa of .95 (range .80 to 1.00).

However, while an important aspect of this review is to determine the frequency in which adolescent risk assessment tools are used within juvenile court proceedings, case law reviews such as this are only able to capture a handful of legal cases (i.e., Mullen & Edens, 2008, Vitacco et al., 2012; Viljoen et al., 2010). This occurs for multiple reasons. First of all, many cases do not have written decisions; therefore, our search is limited to cases in which the judge has provided a written decision. Secondly, most legal cases are not reported or published in legal databases. It is important to note that this distinction does not refer to whether the case is available to the public, but whether the decision is published and circulated for commercial

purposes (Arnold, 1999). Furthermore, when the court believes that a particular case does not have precedential value or does not add substantively to the relevant body of law, the court can reserve the case as unpublished (in the United States) or unreported (in Canada). Although they are occasionally found in legal databases such as LexisNexis, unpublished cases have no binding precedential value but may instead be considered to be persuasive authority in some limited jurisdictions. Given this distinction, the results of this review are likely to over represent cases which have highly influential and potentially controversial outcomes, and significantly underrepresent cases which have typical or run-of-the-mill outcomes, or which do not reach higher levels of the court system.

Results

Frequency of Use in Court Cases

Our search resulted in a total of 50 cases which mentioned adolescent risk assessment tools such as the SAVRY or YLS/CMI. In addition to the SAVRY and YLS/CMI, our search terms also revealed several cases which mentioned the LSI-SK, a youth adaptation of the LSI-R specific to the province of Saskatchewan which has a substantial amount of similarity in item content with the YLS/CMI, as well as minimal differences in predictive accuracy (Olver et al., 2009). As such, we chose to group these two risk assessment tools (i.e., YLS/CMI and LSI-SK) together when evaluating our results.

Of the 50 cases that we identified, there were 34 Canadian and 12 American decisions, as well as 4 international cases originating from the United Kingdom and Australia. The earliest available case occurred in 2003 (see Figure 1). Furthermore, the SAVRY and YLS/CMI were mentioned in a similar number of cases; the SAVRY was mentioned in 27 cases (46.6%, $n = 58$) whereas the YLS/CMI and LSI-SK, were mentioned a total of 31 times (53.4%, $n = 58$). Eight cases mentioned both the YLS/CMI and the SAVRY.

Contexts in Which They are Used

Types of Cases. The most common context in which adolescent risk assessment tools were used was in sentencing and/or disposition hearings (see Table 2). However, they were also frequently used in cases of adult certification or transfer to criminal court in the United States and adult sentencing in youth courts in Canada, respectively.[8] Importantly, those cases in the US which involved adult certification or transfer to criminal court were also appeals made by the youth and their counsel. Less frequently, adolescent risk assessment tools were used in cases concerned with applications to extend and/or continue custody and with dangerous offender applications. Finally, there was also a single case in which the use of the LSI-SK in the sentencing of a youth was appealed by Crown counsel.

Types of Offenders and Offenses. In addition to being used in a wide variety of legal proceedings, adolescent risk assessment tools were also used to evaluate a variety of young offenders. Based on the information available in the cases, the mean age at time of offense of the assessed youth was 15.7 ($n = 45$). Furthermore, 42 of the youth in these cases were males, 7

[8] In Canada, adolescents are not transferred to adult court per se; instead, youth courts can directly provide adult sentences. Under some circumstances an application for adult sentencing must be heard and decided upon (Youth Criminal Justice Act, S.C. 2002, c. 1).

were females, and in one case, the offender's gender was unclear. Although information about the ethnicity of these youth was often not explicitly mentioned in court cases, in nine cases the youth was identified as being of Aboriginal descent. Within this sample of cases, most youth were charged with violent or other serious offenses (see Table 3). The most common index offense was robbery or theft (20.3%, *n* = 16); however, a number of youth were charged with serious violent offenses including assault (12.6%, *n* = 10), sexual assault (7.6%, *n* = 6), manslaughter (6.3%, *n* = 5), and murder (10.1%, *n* = 8).

Types of Evaluators. Within this sample of cases, SAVRY and YLS/CMI assessments were completed by evaluators with a variety of professional designations (see Table 4). In particular, evaluators were most commonly mental health professionals including psychologists (33.3%, *n* = 17) and psychiatrists (15.7%, *n* = 8). Other evaluators included youth workers (9.8%, *n* = 5) and probation officers (5.9%, *n* = 3). However, information concerning the professional designation of the evaluator was not available in 33.3% (*n* = 17) of all cases, as written decisions do not always contain all of the case relevant information.

Statements Made about the Risk Assessment. In approximately 41% of cases (*n* = 21), the judge provided a direct quote or statement by the evaluator, or provided their own statement about the specific risk factors that increased the adolescent's likelihood of general or violent reoffending (See Table 5). In terms of the SAVRY, the risk factors identified by the tool were specifically described in 40.7% of cases (*n* = 11). For example, some of the specific risk factors identified in these cases include association with criminal or antisocial peers (e.g., *R. v. Bird*, 2008; *R. v. D. (T.P.)*, 2009; *R. v. Skeete*, 2013), negative attitudes (e.g., *J.T.L, Re.*, 2005; *R v. D.M.*, 2005; *Y.C., Re.*, 2005; *R. v. C.W.W.*, 2006; *DBW (a child) -v- THE STATE OF WESTERN AUSTRALIA*, 2011; *R. v. Skeete*, 2013), drug or alcohol abuse (e.g., *J.T.L, Re.*, 2005; *R. v D. (T.P.)*, 2009; *R v. T. (D.D.)*, 2009; *R v. Skeete*, 2013), low empathy or remorse (e.g., *J.T.L, Re.*, 2005; *R v. Skeete*, 2013), impulsiveness (e.g., *Y.C., Re.*, 2005; *R. v. T. (D.D.*), 2009), and poor coping skills (e.g., *Y.C., Re.*, 2005; *R. v. T. (D.D.)*, 2009; *R v. Skeete*, 2013).

Similarly, specific to the YLS/CMI or LSI-SK, the individual risk identified by the tool were mentioned 32.3% (*n* = 10) of the time. In particular, some of the most commonly mentioned factors included a history of prior offenses (e.g., *R. v. D. (T.P.)*, 2009; *R v. Skeete*, 2013), substance abuse (e.g., *R. v. D. (T.P.)*, 2009; *R. v. W. (A.)*, 2009; *R. v. D. (B.H.)*, 2006; *R v. Skeete*, 2013), negative peer relations (e.g., *R. v. D. (T.P.)*, 2009; *R. v. T. (T.W.)*, 2007; *R. v. W. (A.)*, 2009; *R. v. D. (B.H.)*, 2006; *R. v. R.H.*, 2013), and education or employment (e.g., *R. v. T. (T.W.)*, 2007; *R. v. W. (A.)*, 2009; *R. v. D. (B.H.)*, 2006). Furthermore, of these cases, only three directly identified these risk factors as being dynamic and amenable to change. For example, in *R v. Skeete* (2013) the presiding judge, in summarizing the report notes that the youth's "[d]ynamic factors […] may be amenable to change over time if addressed through treatment or by altering [the] environment (para. 154)."

In approximately 20% of cases (*n* = 11) judges went on to address the specific protective factors or strengths of the youth, as identified by the risk assessment tools (see Table 5). For example, in summarizing the results of the SAVRY, judges emphasized protective factors such as pro-social involvement and strong social support from adults (*R. v. B. (L.A.)*, 2007; *DBW (a child) -v- THE STATE OF WESTERN AUSTRALIA*, 2011) as well as strong attachment and bonds (*Regina v. AJC*, 2010; *DBW (a child) -v- THE STATE OF WESTERN AUSTRALIA*, 2011;

R. v. T. (B.), 2013). Furthermore, important strengths identified by the judge in summarizing the results of the YLS/CMI or LSI-SK were empathy and cognitive ability (e.g., *R. v. T. (T.W.)*, 2007), family circumstances and parenting, prosocial attitudes, and a limited criminal history (e.g., *R. v. D. (B.H.)*, 2006). However, in some cases judges mentioned the apparent and complete lack of protective factors or strengths identified by the risk assessment tool (e.g., *J.T.L, Re.*, 2005; *Y.C., Re.*, 2005; *R. v. C.W.W.*, 2006; *R. v. H. (M.A.)*, 2006; *R v. Skeete*, 2013) and even suggest that this lack of protective factors is evidence that the youth is especially high risk and has a poor prognosis for rehabilitation (e.g., *J.T.L, Re.*, 2005; *Y.C., Re.*, 2005).

In addition to addressing the specific risk and protective factors, the judges in 48 of the 50 cases also stated or quoted the overall or summary risk rating provided by the assessment. While not explicitly mentioned by the judge, an interesting pattern amongst those cases which utilized more than one of the SAVRY and YLS/CMI was that there was a consistent level of agreement between these tools. In particular, six of the eight cases which used more than one tool rated the youth at the same level of risk to reoffend (e.g., *Julianna B*, 2007; *M.J. (J.), Re*, 2010; *R. v. B. (L.A.)*, 2007; *R. v. Bird*, 2008; *R. v. D. (T.P.)*, 2009; *R. v. T. (T.W.)*, 2007; *R. v. Skeete*, 2013; *R. v. T.(B.)*, 2013). However, there was some difference between the outcomes of these tools; for example, in the case of *R. v. H. (P.)* (2005), the evaluator used three tests including the YLS/CMI and the SAVRY; using the YLS/CMI he concluded that the youth was at a high risk for general reoffending while on the SAVRY he concluded that the youth was only at moderate risk for violent offending.

Finally, these cases also provide some evidence that courts may prefer these tools compared to unstructured clinical judgement. For example, this was espoused in *R. v. Casavant* (2009) in which two psychiatrists evaluated the risk of an adolescent to reoffend. The first evaluator concluded that the youth is at high risk to reoffend based on his general opinion. This was consistent with the findings of the other psychiatrist who employed the SAVRY and also rated the youth as an overall high risk. Considering their findings, the judge concluded that the opinion of the psychiatrist who employed the SAVRY was more convincing because it stood up under cross-examination and did not change radically over the course of time, unlike that of the psychiatrist who cited only his professional opinion.

Weight in Decision Making

In explaining their decision about the relevant legal issue, judges directly referred to the conducted risk assessment in nearly half of cases (46.0%, $n = 23$; see Table 6). However, in terms of the actual weight that judges placed on these statements in forming their decisions, the use of this evidence was highly variable. Typically, judges were most likely to place some weight on the risk assessment and considered it to be one of many relevant factors. For instance, in the case of *R. v. C.W.W.* (2006, para. 44) the judge determined that a juvenile sentence was not sufficient to account for the evidence presented by the psychiatrist who conducted the risk assessment, the seriousness of the offense, or public safety. The risk assessments were also sometimes considered in cases as one of many factors in achieving sentencing goals. In particular, this included achieving and maintaining the least restrictive alternative. For instance, in *M.J.(J.), Re* (2010; para. 42), the judge determined that the youth continued to pose a threat to public safety partly due to the outcome of the risk assessment, which stated that he was a low to moderate risk to reoffend, but that this risk was likely to be heightened if he was in an

unstructured environment. Similarly, minimizing the risk presented in the risk assessment report through appropriate sentencing (e.g., custodial vs. non-custodial) was also one of many factors considered in several other cases (e.g., *J.A.R., A JUVENILE*, 2011; *J.T.S*, 2008; *R. v. B. (L.A.)*, 2007; *R. v. Bird*, 2008; *R. v. Casavant*, 2009; *R. v. D. (T.P.)*, 2009); *R. v. W.(A.)*, 2009; *R. v. H. (M.A.)*, 2006; *T. (C.), Re*, 2012; *IN THE MATTER OF: I.S.P., Adjudicated Delinquent Child*, 2010).

However, these risk assessment outcomes also appeared to hold even greater weight in a small proportion of cases (4.0%, $n = 2$). For instance, in the case of *J.(M.), Re* (2010) the court affirmed an application to continue the custody of a youth pursuant to the Youth Criminal Justice Act (2002). In the decision, the judge concluded that the youth was likely to commit a serious violent offence if released to the community before the expiry of his sentence. This was largely based on evidence presented by the SAVRY which placed him at a high risk to reoffend violently.

Concerns or Legal Challenges

In 22.0% of cases ($n = 11$), concerns or challenges about the use of risk assessment tools in adolescent legal proceedings were raised. These legal challenges were most often raised by judges (18.0% of all cases, $n = 9$) and only sometimes by prosecutors (2.0% of all cases, $n = 1$) and by defense counsel (2.0% of all cases, $n = 1$). Although risk assessment tools were subject to legal challenges in only one fifth of cases, a few salient themes appeared which could have significant importance for influencing later cases.

Of the cases which raised legal concerns about the use of these risk assessment tools in adolescent legal proceedings ($n = 11$), six of them were particularly concerned with how these tools may be inappropriately used to guide sentencing following adjudication. This was particularly relevant for Canadian cases utilizing the LSI-SK. For instance, this issue is raised in the case of *R. v. D. (M.D.)* (2004) in which the sentencing judge contends that the risk assessment "may inadvertently become a tool for sentencing the young person, not for what [they have] done but for what [they] might do (para. 39)" and consequently, "that the objectives and approach taken in the LSI-SK Youth ED. [...] appear to be somewhat at odds with the sentencing principles under the YCJA (para. 40)." This contention is also presented by the judge in *R. v. G. (H.W.)* (2003) who argues that while the risk assessment report may be well meaning, "there is a danger that [...] we may impose conditions [...] which unnecessarily interfere with the young person's liberty (para. 38)."

However, of the cases which raised legal concerns ($n = 11$), six of them were decided by the same judge (*R. v. G. (H.W.)*, 2003; *R. v. D. (M.D.)*, 2004; *R. v. C. (K.L.)*, 2004; *R. v. R. (S.M.)*, 2004; *R. v. D. (T.P.)*, 2009; *R. v. R.H.*, 2013). Overall, his opinion about the admissibility of risk assessments in adolescent court proceedings can be summarized from his decision in *R. v. R. (S.M.)* (2004) in which he argues that "risk/need total scores should not be used in the determination of dispositions [because] the use of actuarial tools in sentencing could amount to *statistical justice* [emphasis added] (Reichman, 1986) (para. 48)." He observes that the logic of risk assessment contradicts the purpose and principles of sentencing contained in the YCJA (2002) because "risk/need scores are not a measure of the seriousness of an offence, [...] nor is future crime relevant to proportionality (para. 48)." Instead, he notes that "from a sentencing

judge's perspective the interest in risk assessment information lies in the reliable identification of needs and an effective response to those needs (para. 49)" and concludes that,

> "Assessment of the risk to re-offend must not be confused with the very valid purpose of this Act [YCJA, 2002] which is to address the circumstances underlying the young person's offending behaviour. Nor should it be allowed to influence sentencing decisions because rehabilitation and reintegration are central to sentencing. Based on the foregoing reasoning, I am not prepared to consider the Young Person's assessed risk to re-offend in arriving at the appropriate sentence. I am concerned about the dangers of misusing of the risk assessment and the potential for prejudice to the young person (para. 52)."

Due to these challenges, the risk assessment was dismissed or considered inadmissible by the court in many of these cases (e.g., *R. v. B. (D.H.)*, 2006; *R v. R. (S.M.)*, 2004; and *R. v. P. (T.D.)*, 2004).

Related to sentencing, another concern raised in one of the cases was the appropriateness of using risk assessment tools to assess a youth's prior record of delinquency during adult certification procedures. In particular, in the case of *J. R. L., Child* (2009) the trial judge used clinical reports and SAVRY results to determine whether the juvenile had a sufficient prior record of delinquency to warrant adult certification; a decision which was ultimately appealed by defense counsel. The appeal judge concluded that the "SAVRY ratings [were] not part of [the] appellant's juvenile record of adjudications," and therefore, that it was inappropriate to conclude that the juvenile had a prior record of delinquency based on evidence of "a multitude of factors that substantially increased [his] risk for future acts of delinquency." Although the appeal judge determined that the court had abused its discretion by including this information in the prior record of delinquency record, he concluded that this was not enough to reverse the adult certification, and the trial court's decision was affirmed.

Although the concerns associated with considering risk assessment results at the sentencing stage (ie. following adjudication) were most often raised by judges, the admissibility of these tools was also challenged by counsel in the case of *R. v. Q. (K.)* (2006). In this appeal, the Crown applied to reverse the rulings of two judges who concluded that pre-sentence reports which are conducted for sentencing hearings must not contain any reference to risk assessment, and in particular, the LSI-SK. This is to say that because Youth Justice Court Judges, in accordance with the YJCA, automatically receive pre-sentence reports when considering a custodial sentence, (YCJA, S.C. 2002, c. 39), it is feared that this information will be used as an aggravating circumstance when crafting a young person's sentence. However, on this matter the judge deferred to the affidavit of the Provincial Director who stated that,

> "it is made clear in the Purpose and Methodology introduction in each pre-sentence report that the pre-sentence report is to provide information for the youth justice court to assist in determining appropriate sentencing alternatives in accordance with the Act, and that any reference to the assessed likelihood to re-offend is not intended to constitute a recommendation as to type of sentence or length of sentence; for example, an assessed *high* likelihood to re-offend should not be viewed as indicating a custody sentence (para. 12)."

Consequently, the judge concluded that the Youth Justice Court Judge was not authorized to determine the contents of the pre-sentence report by excluding the LSI-SK, and permitted the inclusion of the risk assessment report during the sentencing hearing.

Additionally, another salient legal concern raised by the courts was the subjective reporting associated with these risk assessment tools. For instance, the judge in *R. v. G. (H.W.)* (2003) argued that "while the [LSI-SK Youth Edition] may be more scientific and reliable in assessing risk than personal opinion, it may nonetheless be subject to error (para. 32)." In this particular case he questioned the evaluator's conclusion that the youth had no "emotional or mental health issues and […] no diagnosed learning disabilities." As a possible remedy to this issue, he suggests that "it would be useful for the court [...] to have access to the information used for completion of this risk assessment tool (para. 33)."

Finally, in one case the importance of obtaining consent from the youth before conducting the risk assessment was raised. In particular, this was seen in the case of *R. v. D. (B.H.)* (2006) in which the youth was not directly informed that the purpose of the assessment was to include a risk assessment in the pre-sentence report, and therefore, was not able to provide informed consent for the inclusion of that information in the sentencing proceedings. As a consequence, the report was considered by the judge to be inadmissible for the proceedings, and provided no weight on the risk assessment or pre-sentence report in his decision making.

Discussion

In order to acquire a greater understanding of how risk assessment tools such as the SAVRY and YLS/CMI are used in adolescent court cases, we searched and reviewed Canadian, American, and international cases in which these tools were used to examine a juvenile offender for their future risk to reoffend. Our search revealed that these tools have been introduced as evidence in 50 instances, including 34 Canadian, 12 American, and 4 international cases. However, as previously mentioned, this type of review is limited in its ability to provide absolute numbers of cases which use these tools. In particular, most cases do not include written decisions by the judge and/or are not available in legal databases. As such, this review is best suited to show patterns of usage and potential issues and concerns.

Overall, the results of this review suggest that the courts generally respond positively to these tools. This is evidenced by the continued use of these tools in adolescent court proceedings over the past decade; the use of both actuarial (YLS/CMI) and structured professional judgement (SAVRY) tools; the wide range of offenses and legal proceedings in which they are utilized; the attention paid to risk and protective factors in adolescents; the references made to these tools during the decision making process; and the generally successful admission of these tools as evidence without any apparent contentions or concerns.

Based on this sample of cases there does not seem to be a growing preference for a specific tool. In particular, the SAVRY was utilized in 46.6% (n = 27) of cases while the YLS/CMI and LSI-SK were used in 53.4% (n = 31), including eight cases which mentioned both the SAVRY and the YLS/CMI. This is generally consistent with surveys which demonstrate that many clinicians believe tools based on structured professional judgement and actuarial (or adjusted actuarial) models are both useful in conducting risk assessments (Viljoen et al., 2010). In addition, this review also found that there was consistent agreement between evaluators using

the SAVRY and the YLS/CMI. This is important because it corresponds with research findings which demonstrate that these tools often have high correlations (Catchpole & Gretton, 2003). However, it is important to remember that while these tools are highly correlated, this does not suggest that a youth who scores high on both measures poses a doubly high risk.

This review also provided some insight into how adolescent risk assessment tools are used in legal proceedings. In particular, the SAVRY, YLS/CMI, and LSI-SK were often used during the sentencing or disposition stage following adjudication. This is particularly important because risk assessment outcomes have previously been shown to be highly relevant in affecting juvenile court decision making and that there is a significant association between the outcomes of these assessments and the sentence which adolescents receive (Lodewijks, Doreleijers, & De Ruiter, 2008). In addition, adolescent risk assessment tools were also used in cases of adult certification in the US, and adult sentencing in Canada. The emphasis of risk assessments in such cases is often a youths' long-term risk; however, thus far relatively little evidence exists regarding the ability of adolescent risk assessment tools to predict long-term risk (Edens & Cahill, 2007; Worling, Bookalam, & Litteljohn, 2012). Although adolescents' risk may be quite dynamic, some studies do suggest that long-term predictions with these tools may be possible in some cases (Schmidt et al., 2011; Olver, Stockdale, & Wong, 2012).

Although all of the cases included in this law review made reference to a risk assessment conducted using at least one of the SAVRY, YLS/CMI, or LSI-SK, only an approximate one third of these cases referenced the specific risk factors that were salient for each of these adolescents. This could be due to the nature of the legal proceedings; because the majority of cases utilizing these tools were interested in sentencing, it is likely that court officials were highly interested in the overall risk of the youth to reoffend, but not the specific dynamic needs that should be addressed through treatment and management. When they were addressed, the most commonly mentioned risk factors included criminal or antisocial peer relationships, drug or alcohol abuse, and education or employment. Importantly, protective factors and strengths identified by the SAVRY and YLS/CMI assessments were considered approximately 29.6% and 9.7% of the time, respectively. This is significant because protective factors have been shown to buffer or mitigate risk to reoffend violently (Lodewijks et al., 2010; Rennie & Dolan, 2010). In particular, violent reoffending is significantly higher for youth when protective factors are absent compared to when they are present (Lodewijks et al., 2010). However, it is also possible that these factors were considered more often in these cases but were not formally published in their opinions.

Overall, the findings of this review present mixed results as to how much weight is placed upon risk assessments in adolescent legal proceedings. Generally, it appears that the relative importance given to these risk assessment outcomes is dependent on the case. For instance, judges placed no clear weight or disregarded the evidence surrounding the risk assessment in 38% of the cases. When they did consider the risk assessment in their decision, judges were most likely to place some weight on this information by including it amongst a multitude of other relevant factors. Consistent with previous findings that assessments are often relevant to decision making during the sentencing stages (Lodewijks et al., 2008), this was often the case in sentencing or disposition hearings and adult certification and transfer in both Canada and the US. However, judges did place clear emphasis on the importance of the risk assessment in coming to their decision in a limited number of cases. For instance, the risk assessment

appeared to be an important and heavily weighted factor in applications related to continuing or extending custody.

Finally, this review revealed that there have also been several salient legal challenges associated with the admission of risk assessment tools as evidence. In particular, the most pervasive of these challenges arose in Canadian cases as a result of the apparent conflict between the nature and logic of risk assessment and the sentencing principles presented by the YCJA (2002). According to the purposes and principles of sentencing outlined in the Act, any sentence which is delivered to a youth must not be greater than the punishment an adult would receive for the same offense; be similar to comparable cases; proportionate to the seriousness of the offense and culpability of the youth; consider all reasonable sanctions other than custody; and the sentence must be the least restrictive alternative which is the most likely to rehabilitate and promote a sense of responsibility in the youth (YCJA, S.C. 2002, c. 38). In terms of these sentencing principles, the concerns associated with risk assessment tools appears to be with its appropriateness in informing the severity and nature of the sentence. In particular, judges in this review have expressed concern that youth could essentially be penalized for acts they have not yet committed but are simply judged to be at risk for, and furthermore, that the results of a risk assessment could be treated as an aggravating factor in sentencing.

Thus, the role and weight of risk assessments in informing sentencing appears to be a difficult issue that courts need to grapple with. On the one hand, risk assessment tools may potentially help judges to make decisions concerning the disposition of a juvenile offender which would provide the best prospect for reducing future offending (Grisso & Vincent, 2005). This is especially important given that public protection is typically a paramount goal. Importantly, however, these tools do not contain normative cut off scores which would suggest one sentencing outcome over another, and there are numerous other considerations. Thus, they cannot and should not be used as a sole basis for these opinions. Consistent with this, the results of this case law review indicated that judges typically place some weight on risk assessments, as a part of an enumerated list of other relevant factors, rather than basing their decisions solely on this evidence.

Limitations and Future Directions

In order to provide an examination of how adolescent risk assessment tools such as the SAVRY and YLS/CMI are used in court, we conducted a broad search of Canadian, American, and international case law databases and included a broad range of types of legal proceedings. This allowed us to obtain a total of 50 cases predominantly including sentencing or disposition hearings and appeals of adult certification and transfer decisions. However, the nature of this search is associated with some important limitations. First of all, this review is only able to capture cases which have written decisions. Moreover, because most cases contained in legal databases are published cases which have been deemed to have significant precedential value, it is likely that our results are over-representative of contentious cases and significantly under-representative of more typical cases. As a result, it is possible that these risk assessment tools are being utilized in different ways or more often than this review has revealed. Consequently, it will be important for future research to conduct a more exhaustive review, possibly by including court transcripts or gaining access to additional international legal databases.

Secondly, although our sample size is larger than sample sizes of comparable case law surveys of adult risk assessment tools (Vitacco et al., 2012), another important limitation of this case law review is the limited number of available cases using the SAVRY and YLS/CMI (n = 50). Through our search, we discovered that this may be the case due to the existence of multiple regional, provincial, and state specific adaptations of these tools, often without proper empirical support (Hannah-Moffit & Maurutto, 2003; Vincent et al., 2009). Consequently, although we attempted to focus on only the SAVRY and YLS/CMI, in order to increase our sample of cases we searched for additional cases by including youth adaptations of the LSI-R other than the YLS/CMI. This expansion of the search terms revealed several cases using the LSI-SK, an adaptation of the YLS/CMI used in Saskatchewan which is empirically similar to the YLS/CMI (Hannah-Moffit & Maurutto, 2003). However, it is important to note that there are additional adaptations currently in use, particularly in the Canadian court systems. For example, prominent LSI-R adaptations include the LSI-OR, developed and used in Ontario (Hannah-Moffit & Maurutto, 2003), as well as the YLS/CMI Australian adaptation (YLS/CMI-AA; Hoge & Andrews, 1995). Although our search was not able to locate cases using these tools in particular, it will be important for future research to include a broader range of risk assessment tools in order to develop a more robust picture of how these risk assessment tools are being used.

In order to increase the size of our sample and to glean additional information about the use of these tools in adolescent court proceedings, we searched for and included international cases whenever possible. However, while this is an important strength of this review it is essential to note that many countries differ considerably in their legal systems and standards of admissibility. For instance, the United States is considered to have a more punishment and retribution oriented sentencing philosophy than countries such as Canada (Doob & Webster, 2006); although recent legal reforms in the United States have softened this somewhat (Roper *v.* Simmons, 2005). Furthermore, the countries included in this review all utilize common law systems which tend to be primarily adversarial in nature.[9] These adversarial systems tend to result in significant challenges for expert testimony, including the potential for experts to become "hired guns;" unconscious bias amongst paid experts; and selection bias by attorneys who choose their own experts (Bernstein, 2007). While admissibility standards such as Daubert (*Daubert v. Merrell Dow Pharmaceuticals*, Inc., 1993) attempt to mitigate the potential for these problems (Bernstein, 2007), it is possible that our results may have been impacted by these issues. As such, it will be important for future research to also explore the use of risk assessment tools in countries with inquisitorial systems of law, and the impact that the differences between these systems has on the use and admissibility of these tools.

Finally, it is important to note that the results of this review are limited by the amount and type of information provided by the judge in the written decision. Specifically, it is often the case that judges do not provide all of the information relevant to a case or their judgement in their written decision. As such, it is possible that the outcome or details of the risk assessment may have been discussed more thoroughly in court than is portrayed in the written decision. For example, the specific risk and protective factors of youth may have been discussed more often

[9] The United States, United Kingdom, Australia, and Canada use a primarily adversarial system in which two opposing parties face a neutral judge and/or jury. However, there are some exceptions. For instance, in Canada the province of Quebec is bijuridicial; civil matters are regulated using a civil law system, whereas criminal matters are regulated through the common law system.

and in more detail than the results of this review suggest. Moreover, this could have important implications for our assessment of the weight that judges place on risk assessment tools during the decision making process. Consequently, the results of this review should be interpreted with caution and are best used to show patterns of use and potential concerns.

Implications

Although the purpose of this case law review was to describe how adolescent risk assessment tools are used in legal proceedings and not to offer direction or advice about how these tools should be used, some strengths and possible areas of improvement can be identified from our results. In particular, this review revealed that protective factors are sometimes being considered by judges as an important aspect of the risk assessment. This is significant because it is consistent with research that has shown protective factors may play an important role in mitigating the effects of risk factors in high risk adolescent offenders (Lodewijks et al., 2010; Rennie & Dolan, 2010).

However, while the consideration of some protective factors can be seen as a relative strength of current court practices, our results also indicate that there is considerable room for improvement. First, although some attention is currently being paid to protective factors, this is an area where even more attention may be merited. For instance, because the presence of protective factors amongst youth have shown to predict desistance from reoffending (Lodewijks et al., 2010; Rennie & Dolan, 2010) they should be considered an increasingly important aspect of risk management and treatment planning within the youth criminal justice system.

Second, another means through which the use of these tools in adolescent legal proceedings could be improved is by increasing emphasis on the dynamic nature of many of the risk factors identified by these tools. As previously demonstrated, very few judges explicitly noted in their decisions that the specific risk factors of the youth were highly amenable to change. This could be particularly relevant for the issue of sentencing and adult transfer because while judges are sometimes using this information to inform their decisions, they are rarely recognizing that the appropriateness of the conditions imposed upon the youth may change as the risk and protective factors specific to the youth change. This is consistent with the general observation that in terms of development, adolescents are "moving targets" (Borum, 2000; Melton et al., 2007). To ensure that greater attention is placed on the dynamic nature of risk, clinicians who conduct risk assessments for the courts should further emphasize the malleability of these traits and the tendency for youth to change as they progress through their psychosocial and emotional development (Borum, 2000). In addition, from a policy perspective, this suggests the need for the courts to frequently review the conditions that they impose on young offenders.

Finally, given the challenges that were raised regarding the use of risk assessment in adolescent sentencing, this suggests a need for further discussion and education by both courts and clinicians about the role that risk assessments should and should not play in sentencing. This concern is also reiterated in a survey of Canadian judges conducted by Bonta, Bourgon, Jessman and Tessine (2005), which revealed that 68.3% of judges agreed that risk assessments should be included in pre-sentence reports. However, 21.2% were overtly opposed to including this information. Although many judges cited concerns about the validity and reliability of risk assessment tools as the reason for their opposition (Bonta et al., 2005), this further indicates the need for ongoing discussion between mental health professionals and the courts about the role

and purpose of risk assessment. For example, there appears to be a growing consensus amongst legal professionals that the main purpose of risk assessment should be to reduce future violence through implementing effective risk management and preventative strategies (Luther & Mansfield, 2006) as opposed to informing sentencing and disposition decisions, which has the potential to disrupt proportionality and contribute to 'statistical justice' (Maurutto & Hannah-Moffat, 2007).

The results of this case law review also provide some possible directions for future areas of research. First of all, future law reviews could explore the sentencing outcomes associated with the SAVRY and YLS/CMI. For example, it would be interesting to compare the dispositions of youth who have comparable index offenses but different identified risk levels. Although research has shown that there is a significant relationship between unstructured clinical assessments of risk and sentencing outcomes (Lodewijks et al., 2008), this relationship has not been established using risk assessment tools. Another prospective area of research could be to survey judges regarding how often and in what contexts they most often encounter these risk assessment tools, their satisfaction with risk assessments, and how likely they are to include this information in their decision making process. Given that many cases do not include written decisions, this could provide information which a case law review cannot. Furthermore, as many risk assessments are provided for the courts, there is a strong need for a better understanding of the perspectives of legal consumers of risk assessments (Heilbrun et al., 2011; Otto & Heilbrun, 2002).

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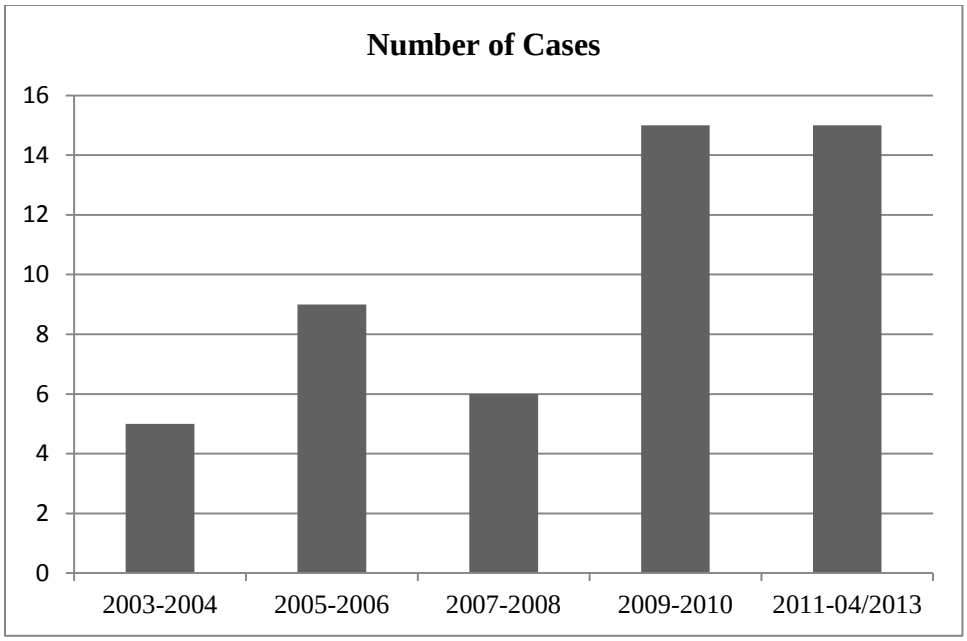

Figure 1. Number of cases using the specified adolescent risk assessment tools. Note that there were no published instances prior to 2003.

Table 1

Interrater Reliability

Variable	% agreement	κ coefficient
Type of Legal Proceeding	90%	-
Current Charge(s)	100%	1.00
Evaluator Background	90%	.87
Judge referred to risk assessment in making legal decision	100%	1.00
How much weight the Judge placed on the risk assessment	90%	.80
Challenges or disputes arose regarding the risk assessment as evidence	100%	1.00
Who challenged or disputed the risk assessment	100%	1.00

Note: n = 10. It was not possible to calculate kappa for Type of Legal Proceeding because all of these cases were sentencing evaluations, and thus there was not adequate range.

Table 2

Types of Court Cases in which Adolescent Risk Assessments were Included

Type	Percentage (n = 51)
Sentencing/Disposition	66.7% (n = 34)
U.S. Adult Certification/Transfer to Criminal Court	13.7% (n = 7)
Canada Adult Sentencing	11.8% (n = 6)
Application for Extended/Continued Custody	3.9% (n = 2)
Dangerous Offender Assessment	2.0% (n = 1)
Other (ie. evidence admissibility)	2.0% (n = 1)

Note: One case, R *v.* Bird, included two applications, and hence is counted twice.

Table 3

Types of Offenses in which Adolescent Risk Assessments were Conducted

Type	Percentage (*n* = 79)
Murder	17.7% (*n* = 14)
Murder	10.1% (*n* = 8)
Attempted Murder	1.3% (*n* = 1)
Manslaughter	6.3% (*n* = 5)
Sexual Assault	7.6% (*n* = 6)
Assault	12.6% (*n* = 10)
Kidnapping/Abduction/Unlawful Confinement	6.3% (*n* = 5)
Robbery/Theft	20.3% (*n* = 16)
Break and Enter	8.9% (*n* = 7)
Possession of Weapon for Dangerous Purpose	7.6% (*n* = 6)
Unlawful Possession	2.5% (*n* = 2)
Uttering Threats	2.5% (*n* = 2)
Criminal Negligence Causing Bodily Harm	1.3% (*n* = 1)
Arson	1.3% (*n* = 1)
Criminal Mischief	1.3% (*n* = 1)

Note: Many cases contained more than one charge; this excludes probation and bail breaches.

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Table 4

Professional Designations of Evaluator who Conducted the Risk Assessment

Type	Percentage (n = 51)
Psychologist	33.3% (n = 17)
Psychiatrist	15.7% (n = 8)
Youth Worker	9.8% (n = 5)
Probation Officer	5.9% (n = 3)
Other	2.0% (n = 1)
Unknown	33.3% (n =17)

Note: One case, R *v*. D. (M.D.), included two evaluations by different evaluators and therefore, is counted twice.

Table 5

Statements Made About the Risk Assessment Tool

Type	SAVRY (*n* = 27)	YLS/CMI or LSI-SK (*n* = 31)	Overall (*n* = 58)
Refers to youth's specific risk factors	40.7% (*n* = 11)	32.3% (*n* = 10)	36.2% (*n* = 21)
Refers to youth's protective factors or strengths	29.6% (*n* = 8)	9.7% (*n* = 3)	19.0% (*n* =11)

Note: Some cases used both the YLS/CMI and SAVRY; in interpreting these results, it is important to remember that published cases do not contain all of the case relevant information. Therefore, it is possible that the details of the assessment were discussed but not published.

Table 6

Weight Placed on Risk Assessments in Judicial Decision Making

Type	Percentage (n = 50)
Referenced Risk Assessment in Decision	
Judge did not refer to risk assessment in making legal decisions	24.0% (n = 12)
Judge indirectly referred to risk assessment (e.g., risk assessment not directly mentioned, but refers to risk, needs, or management).	30.0% (n = 15)
Judge directly referred to risk assessment in making legal decisions	46.0% (n = 23)
Weight Placed on Risk Assessment in Decision	
Judge placed no clear weight or disregarded these statements	38.0% (n = 19)
Judge placed some weight (e.g., one of many factors considered)	58.0% (n = 29)
Judge put great weight on the risk assessment (e.g., singled it out as an important factor)	4.0% (n = 2)
Risk Assessment was Challenged or Disputed	
Inclusion of risk assessment statements were challenged or disputed	22.0% (n = 11)

Appendix B
Canadian Cases Included

Note that cases are listed in chronological order

1. R. v. G. (H.W.); 2003 CarswellSask 576; 2003 SKPC 122, 236 Sask. R. 209
2. R. v. R. (S.M.); 2004 CarswellSask 807; 2004 SKPC 131, 191 C.C.C. (3d) 524, 256 Sask. R. 107
3. R. v. C. (K.L.); 2004 CarswellSask 580; 2004 SKPC 98, 252 Sask. R. 254
4. R. v. D. (M.D.); 2004 CarswellSask 633; 2004 SKPC 106, 253 Sask. R. 109
5. R. v. P. (T.D.); 2004 CarswellSask 267; 2004 SKPC 57, [2004] 3 C.N.L.R. 318, 250 Sask. R. 3
6. J.T.-L., Re; 2005 CanLii 42306 (QC CQ)
7. R. v. H. (P.); 2005 CarswellOnt 7764
8. Y.C., Re; 2005 CanLii 24382 (QC CQ)
9. R. v. McKenzie, 2006 CanLII 6589 (ON SC)
10. R. v. W. (C.W.); 2006 CarswellAlta 958; 2006 ABPC 191, [2007] A.W.L.D. 37, [2007] W.D.F.L. 3, 403 A.R. 344, 77 W.C.B. (2d) 507
11. R. v. Q. (K.); 2006 CarswellSask 748; 2006 SKQB 516, 288 Sask. R. 232
12. R. v. H. (M.A.); 2006 CarswellSask 516; 2006 SKPC 78
13. R. v. D. (B.H.); 2006 CarswellSask 322; 2006 SKPC 32, 281 Sask. R. 191
14. R. v. T. (T.W.); 2007 CarswellAlta 1771; 2007 ABPC 346, [2008] A.W.L.D. 794
15. R. v. B. (L.A.); 2007 CarswellOnt 7391; 2007 ONCJ 538
16. R. v. Bird; 2008 CarswellAlta 752; 2008 ABQB 327, 435 A.R. 313, 95 Alta. L.R. (4th) 13, [2008] A.W.L.D. 4674, [2008] A.W.L.D. 4663, [2008] A.W.L.D. 4667, [2008] A.W.L.D. 4662, [2008] A.W.L.D. 4673
17. R. v. F. (B.C.); 2008 CarswellSask 548; 2008 SKPC 98, 79 W.C.B. (2d) 410, 326 Sask. R. 77
18. R. v. Casavant; 2009 CarswellAlta 1885; 2009 ABQB 672, [2010] A.W.L.D. 280, [2010] A.W.L.D. 287, 16 Alta. L.R. (5th) 201, 484 A.R. 103
19. R. v. D. (T.P.); 2009 CarswellNS 644; 2009 NSSC 332, 901 A.P.R. 19, 284 N.S.R. (2d) 19
20. R. v. T. (D.D.); 2009 CarswellAlta 988; 2009 ABQB 362, [2009] A.W.L.D. 3914, 11 Alta. L.R. (5th) 266, [2010] 3 W.W.R. 727, 467 A.R. 341
21. R. v. H. (N.); 2009 CarswellNS 427; 2009 NSPC 36, 891 A.P.R. 148, 280 N.S.R. (2d) 148
22. R. v. C. (C.H.); 2009 CarswellAlta 301; 2009 ABQB 125, [2009] A.W.L.D. 2682, 465 A.R. 240
23. R. v. J. (B.); 2009 CarswellAlta 1299; 2009 ABPC 180, [2009] A.W.L.D. 3744, [2009] A.W.L.D. 3751, 479 A.R. 233
24. R. v. M. (M.K.); 2009 CarswellSask 501; 2009 SKCA 88, 331 Sask. R. 137, 460 W.A.C. 137
25. J. (M.), Re; 2010 CarswellNfld 225
26. M.J. (J.), Re; 2010 CarswellOnt 5304
27. R. v. J.(T.F.); 2010 CarswellSask 399; 2010 SKPC 88, [2011] 1 W.W.R. 316, 358 Sask. R. 103
28. R. v. C. (R.); 2011 CarswellSask 768; 2011 SKPC 145, 98 W.C.B. (2d) 78

29. R. v. K., Regina v. K. and S.; 2012 CarswellYukon 7; 2012 YKYC 3, 99 W.C.B. (2d) 517
30. T. (C.), Re; 2012 CarswellOnt 6171
31. R. v RH; 2013 CanLii SKPC 8
32. R. v. Skeete; 2013 CarswellNS 11; 2013 NSPC 3
33. R. v. M. (C.); 2013 CarswellAlta 248; 2013 ABPC 30
34. R. v. B.T., 2013 NSPC 23

Appendix C
American Cases Included

Note that cases are listed in chronological order

1. In re Julianna B., No. 1125, SEPTEMBER TERM, 2007, COURT OF SPECIAL APPEALS OF MARYLAND, 179 Md. App. 512; 947 A.2d 90; 2008 Md. App. LEXIS 47, May 2, 2008
2. In re Welfare of J.T.S., A07-1209, COURT OF APPEALS OF MINNESOTA, 2008 Minn. App. Unpub. LEXIS 968, August 12, 2008
3. In re Welfare of G.S.G., A09-438, COURT OF APPEALS OF MINNESOTA, 2009 Minn. App. Unpub. LEXIS 1205, November 10, 2009
4. In re Welfare of J. R. L., A09-887, COURT OF APPEALS OF MINNESOTA, 2009 Minn. App. Unpub. LEXIS 1218, November 17, 2009
5. In re Welfare of L.L.S., A08-1545, COURT OF APPEALS OF MINNESOTA, 2009 Minn. App. Unpub. LEXIS 268, March 17, 2009
6. In re Welfare of A.T.Y., A11-117, COURT OF APPEALS OF MINNESOTA, 2011 Minn. App. Unpub. LEXIS 752, August 8, 2011
7. In re J.A.R., No. 08-10-00188-CV, COURT OF APPEALS OF TEXAS, EIGHTH DISTRICT, EL PASO, 343 S.W.3d 504; 2011 Tex. App. LEXIS 1432, February 28, 2011
8. In re M.L., A130067, COURT OF APPEAL OF CALIFORNIA, FIRST APPELLATE DISTRICT, DIVISION FIVE, 2011 Cal. App. Unpub. LEXIS 9956, December 29, 2011
9. In the Matter of T.T.R., No. 106,897, COURT OF APPEALS OF KANSAS, 279 P.3d 739; 2012 Kan. App. Unpub. LEXIS 523, June 22, 2012 Opinion Filed
10. IN THE MATTER OF: I.S.P., Adjudicated Delinquent Child., No. 09CA37, COURT OF APPEALS OF OHIO, FOURTH APPELLATE DISTRICT, WASHINGTON COUNTY, 2010 Ohio 410; 2010 Ohio App. LEXIS 332, January 28, 2010, Released
11. In the Matter of the Welfare of: D. L. W., Child A12-1112, COURT OF APPEALS OF MINNESOTA, 2013 Minn. App. Unpub. LEXIS 114
12. In Re Interest of Skylar E., A Child Under 18 Years of Age. State of Nebraska, Appellee, v. Skylar E., Appelant. No. A-12-490. 20 Neb. App. 725; 831 N.W.2d 358; 2013 Neb. App. LEXIS 74, April 30, 2013, Filed

Appendix D
International Cases Included

Note that cases are listed in chronological order

1. R v DM [2005] NSWCCA 181
2. REGINA v AJC [2010] NSWCCA 168
3. R v Beesley and another R v Rehman, Court of Appeal, Criminal Division, [2011] All ER (D) 185 (Apr); [2011] EWCA Crim 1021, 18 April 2011
4. DBW (a child) -v- THE STATE OF WESTERN AUSTRALIA [2011] WASCA 206